

**NEW JERSEY DEPARTMENT OF ENVIRONMENTAL
PROTECTION**

NJPDES DISCHARGE TO GROUND WATER PERMIT

TECHNICAL MANUAL

FOR THE SITE REMEDIATION PROGRAM



Christine Todd Whitman, Governor
Robert C. Shinn, Jr., Commissioner
Richard Gimello, Assistant Commissioner

September 1999

Printed on Recycled and Recyclable Paper



NJDEP MISSION STATEMENT

Vision: The Department of Environmental Protection is committed to providing high quality of life for the residents of New Jersey.

Mission: To assist the residents of New Jersey in preserving, sustaining, protecting and enhancing the environment to ensure the integration of high environmental quality, public health and economic vitality. We will accomplish our mission in partnership with the general public, business, environmental community and all levels of government by:

- Developing and integrating an environmental master plan to assist the Department and our partners in decision-making through increased availability of resource data on the Geographic Information System.
- Defining and publishing reasonable, clear and predictable scientifically-based standards.
- Achieving the Department's goals in a manner that encourages compliance and innovation.
- Employing a decision-making process that is open, comprehensive, timely, predictable and efficient.
- Providing residents and visitors with affordable access to safe and clean open space, historic and natural resources.
- Assuring that pollution is prevented in the most efficient and practical way possible.
- Assuring that the best technology is planned and applied to achieve long-term goals.
- Assuring that non-treatable wastes are isolated, managed and controlled.
- Enhancing environmental awareness and stewardship through education and communication.
- Fostering a work environment that attracts and retains dedicated and talented people.
- Committing to an ongoing evaluation of the Department's progress toward achieving our mission.

TABLE OF CONTENTS

A. PROLOGUE: General information about all NJDEP Permit Technical Manuals.....	4
B. APPLICATION FOR NJPDES/DGW PERMITS ISSUED BY THE SRP.....	5
I. INTRODUCTION.....	5
II. APPLICATION/RENEWAL REQUIREMENTS FOR EXISTING DGW PERMITS.....	6
A. General Information.....	6
B. Hazardous Waste Treatment, Storage, and Disposal Facilities.....	7
C. Solid Waste Landfills.....	7
III. PERMIT-BY-RULE, ON-SCENE COORDINATORS, GENERAL AND EMERGENCY PERMITS.....	7
IV. OVERVIEW OF APPLICATION AND PERMITTING PROCEDURES.....	8
V. SRP-DGW APPLICATION FORMS AND RELATED REQUIREMENTS.....	10
VI. APPLICABLE REQUIREMENTS FOR TREATMENT WORKS APPROVALS (TWAs) AND LICENSED OPERATORS	11
A. General TWA/Licensed Operator Requirements.....	11
B. Details for Engineer's Report	12
C. Licensed Operator Determination Worksheet for SRP DGW Permits	13
APPENDICES.....	14
I. SRP'S NJPDES DGW PERMIT APPLICATION FORM: SRP-001	
II. SRP'S NJPDES PERMIT APPLICATION ADMINISTRATIVE CHECKLIST	
III. CLASSIFICATION OF GROUND WATER TREATMENT AND DISPOSAL SYSTEMS WORKSHEET / LICENSED OPERATOR DETERMINATION FOR SRP DGW PERMITS	

A. PROLOGUE

This is a New Jersey Pollutant Discharge Elimination System (NJPDES) permit technical manual prepared pursuant to N.J.S.A. 13:1D-111 to 1D-113. By necessity it condenses and summarizes statutes, regulations, and other documents; as a result it may not always precisely reflect all the requirements set forth in same. In the case of any inconsistency between this technical manual and any statutes, regulations, or policy determinations based upon same, the requirements of the statutes, regulations, or policy determinations shall prevail. Accordingly, this technical manual should not be used as a substitute for a thorough analysis of the law and regulations as they apply to the facts of any specific project or proposal.

Unless otherwise required by federal or state law, the policies and procedures contained in the technical manual which is in effect on the date a permit application is filed, will be binding on both the DEP and the applicant. The technical manuals may be updated every six months or whenever a regulatory change requires revisions. If the publication date of the manual is more than six months old or if you are aware of a regulatory change, you should contact the Bureau of Revenue's Maps and Publications Office for a copy of any appropriate revision.

DEP welcomes suggestions for improving its technical manuals. Please direct your comments to Jeanne Mroczko, Asst. Administrator, Office of Permit Information and Assistance, NJDEP, PO 423, Trenton, NJ, 08625-0423.

You may request additional copies of this manual by sending a check or money order, made payable to the Treasurer, State of New Jersey for \$5.00 (this includes first class mailing by the U.S. Postal Service) to:

Map Sales & Publications Office
Bureau of Revenue
NJ Department of Environmental Protection
PO 417
Trenton, NJ 08625-0417

The SRP's technical manual will be posted on the SRP web page at the following address: www.state.nj.us/dep/srp under the "Regulations and Guidance" link. For information about other technical manuals offered by the Department, contact either the Office of Permit Information and Assistance at (609)292-3600 or the Bureau of Revenue at (609) 777-1039.

Notice: This manual contains forms and applications that are provided as a convenience to the applicant. These forms are included for illustrative purposes only, are not subject to the limitation of N.J.S.A. 13:1D-112(b), and may be updated as often as necessary. Prior to submitting any forms to the Department, an applicant should contact the appropriate bureau to make certain that he or she is using the most up-to-date version.

B. APPLICATION FOR NJPDES-DGW PERMITS ISSUED BY THE SITE REMEDIATION PROGRAM (SRP)

I. INTRODUCTION

This manual generally describes the requirements for completion and review of applications for individual New Jersey Pollutant Discharge Elimination System-Discharge to Ground Water (NJPDES-DGW) permits for discharges onto, or into, the ground resulting from remediation of contaminated sites. The DGW permit is the only type of NJPDES permit issued by the SRP. SRP case managers will help coordinate and expedite NJPDES Discharge to Surface Water (DSW) or other permits needed to implement a remedial action but they do not write or issue any permits other than the DGW.

This manual also contains limited information on expiration, continuance, renewal and revocation of existing DGW permits. Information regarding NJPDES-DGW requirements for certain site remediation activities where individual permits may not always be required is also provided.

The NJPDES-DGW permit program is authorized by the NJ Water Pollution Control Act N.J.S.A. 58:10A-1 et seq., and the NJPDES regulations promulgated under that Act at N.J.A.C. 7:14A. Please note that in February 1997 the NJPDES regulations were repromulgated and underwent major reorganization and revision. The version, dated June 2, 1997 was used in writing this manual. The NJPDES rules can be viewed through the Department web site at www.state.nj.us/dep/dwg by clicking the following three links in sequence: "Rules and Regulations" then "Final Rules and Regulations" then "N.J.A.C. 7:14A - ..."

As partially specified at N.J.A.C. 7:14A-2.4(b) 12 and 7.3, the following categories of activities may require a NJPDES-DGW permit from the Site Remediation Program:

<u>Discharge Code</u>	<u>Type of Discharge</u>
G	Spray Irrigation
H	Overland Flow
I	Infiltration/Percolation Lagoon
I	Open Trench
J	Surface Impoundment
K	Underground Injection Control (UIC)
K	Buried Trench
08	Other Miscellaneous (only use if none of others could possibly apply)

The applicant is required to submit to SRP an application package (see section B.V.) for discharges that are necessary as part of remediation of a contaminated site and require an individual DGW permit. This may include a discharge of treated ground water or any other discharge or potential discharge of pollutants, into, or onto, the ground during site investigations and remedial actions. We can refer to these as remediation discharges.

If a case manager has not been assigned to your case, you should contact the Case Assignment Section of the Bureau of Field Operations (BFO) at (609)292-2943. They will inform you of the steps required for the case to be assigned within the SRP. For remediation discharges, all NJPDES-

DGW permits issued to responsible parties, or other private parties performing remedial activities, are issued by one of the case lead bureaus in the Division of Responsible Party Site Remediation (DRPSR).

II. APPLICATION/RENEWAL REQUIREMENTS FOR EXISTING DGW PERMITS

A. General Information

Permittees with existing DGW permits issued after May 5, 1997, **must** submit permit renewal applications 180 days prior to the expiration date of their permit if they plan to, or are required to, continue discharging and/or monitoring as the permit requires after the expiration date of their existing permit. N.J.A.C. 7:14A-2.7(b) and 2.8(a) allow an expired permit, that NJDEP fails to renew, to continue in full force and effect if a renewal application is submitted 180 days prior to expiration of the permit. However, because of N.J.A.C. 7:14A-7.2(c), all DGW permits issued prior to May 5, 1997, shall continue in full force and effect regardless of when, or whether, the renewal application is submitted. These DGW permits remain effective until they are renewed or revoked (i.e. terminated).

For DGW permits issued after May 5, 1997, where the permittee fails to submit a renewal application 180 days before permit expiration, the permit is not continued in effect after expiration, and the permitted discharge must cease. However, if SRP determines, pursuant to N.J.A.C. 7:14A-2.8(d), "that termination of the discharge will have widespread social or economic impact," SRP may continue the permit. If SRP makes this determination and approves continuation of the permit after the original permit expiration date, pursuant to N.J.A.C. 7:14A-2.8(e), SRP can set a new deadline for submittal of the renewal application.

Per N.J.A.C. 7:14A-16.6(a)1 and/or 7 and 7.4(a)3, SRP can revoke any DGW permit that requires site remedial work for a discharge that occurred prior to May 5, 1997, except one type discussed below. Many permits issued before May 5, 1997, were revoked when NJDEP began overseeing the remedial work at the site using other regulatory mechanisms. Such permittees may request termination of existing permits based on the regulatory citations in this paragraph. The one exception noted above is for DGW permits that contain closure and/or post closure requirements for a RCRA regulated hazardous waste unit. These permits cannot be revoked based solely on the above citations and are discussed further in subsection B., below.

Prior to May 5, 1997, NJDEP issued many DGW permits for site remediation work, which may be expired but are still in effect [per N.J.A.C. 7:14A-7.2(c)]. A few of these permits were issued for former Industrial Site Recovery Act (ISRA) sites; these permits were issued in order for the facility to complete monitoring requirements and be released from the ISRA program. If site remediation work is completed at any of these facilities (former ISRA sites or others), and the facility qualifies for a no further action (NFA) determination for the areas addressed by the permit, the permit should be revoked as part of the NFA determination. In situations where remedial work is still on going, the permit may be renewed and updated to reflect current conditions if another regulatory mechanism is not implemented. In such cases, the case manager for the site should have received a renewal application prior to permit renewal. Permittees without an assigned case manager should call the Case Assignment Section (CAS) in BFO at (609) 292-2943 with questions concerning

permit modification, renewal, or revocation/termination.

B. Hazardous Waste Treatment, Storage, and Disposal Facilities (HW TSDFs)

The SRP has responsibility for closure and post closure NJPDES-DGW permits for closed or closing hazardous waste TSD units; these permits are the equivalent of a RCRA permit. This manual does not include guidance for submittal of closure or post closure plans, as detailed requirements are listed in the applicable regulations and USEPA guidance documents. Applicants for such permits or permittees with existing hazardous waste closure or post closure permits should seek case specific detailed guidance from the case manager assigned to their facility. NJ is not currently authorized for the October 22, 1998, modifications to the RCRA post closure requirements for HW TSDFs. Once this authorization is obtained, regulatory mechanisms other than NJPDES-DGW permits can be used to implement closure and post closure of these units for facilities that do not already have post closure permits.

The Bureau of Nonpoint Pollution Control in the Division of Water Quality (DWQ) has responsibility for NJPDES-DGW permits for operating hazardous waste land disposal units; such permits are a necessary component of NJDEP's equivalent of a RCRA Hazardous Waste Land Disposal Unit Operating Permit. DWQ should be contacted with questions about application for such DGW permits. An important subsection of NJDEP's Technical Requirements for Site Remediation, N.J.A.C. 7:26E-7.1(a)31, is relevant to this discussion and should be reviewed by any party conducting remediation of units containing, or media contaminated by, material meeting the definition of hazardous waste; this subsection exempts certain NJDEP approved remediation work from needing a RCRA TSD Facility permit.

C. Solid Waste Landfills

Most existing DGW permits at closed landfills are being handled by the Bureau of Landfill and Recycling Management in the Division of Solid and Hazardous Waste, thus any questions regarding permit application, renewal or revocation requirements should be directed to that office. Certain closed landfills are, or may become, a SRP high priority due to their actual or potential impacts on human health and the environment. Such landfills are being, or will be, closed with SRP oversight and as a result any existing DGW permits for them would be SRP's responsibility.

III. PERMIT-BY-RULE, ON-SCENE COORDINATORS, GENERAL AND EMERGENCY PERMITS

Certain remediation discharges can proceed without an individual DGW permit if they qualify for a permit-by-rule, on-scene coordinator authority, or a general DGW permit. If appropriate, remedial discharges can also proceed through an emergency permit issued by either oral or written permission, but any issued through oral permission must be followed by a written emergency permit within five days.

The remediation discharges allowed through **permit-by-rule** are described at N.J.A.C. 7:14A-7.5(b) and 8.5 (a)1. These discharges must be related to site investigation, monitoring, evaluation, pilot/feasibility/design studies, remedial alternative activities, or discharges related to heating oil clean-ups at residential buildings of four units or less. Except for the residential heating oil

cleanups, all such discharges are limited to 180 days or less, as specified in the regulations. The SRP case manager will determine if sufficient information is available to serve as the permit application prior to issuing the written approval required for permits-by-rule per N.J.A.C. 7:14A-7.5(b)2. For underground injection control (UIC) program wells, the SRP must make a written request for the inventory information required for permit-by-rule for UIC wells. The information must be submitted within 90 days of this request in order to obtain written approval as specified in N.J.A.C. 7:14A-8.5(a) and (c).

The requirements for **emergency permits** are specified at N.J.A.C. 7:14A-6.14. Emergency permits cannot exceed 180 days in duration. The duration for UIC emergency permits cannot exceed the term required to alleviate the threat or 90 days, whichever is less. If appropriate, and a complete application is available, an emergency permit and a regular draft permit can be combined and issued as one document. For UIC DGW emergency permits, per N.J.A.C. 7:14A-6.14(c)6, the application requirements are the same as for a regular draft permit; for all other emergency DGW permits, sufficient information must be submitted to allow the permit to include the information required to comply with N.J.A.C. 7:14A-6.14(c)3 and 5. Use of the more recent permit-by-rule and on-scene coordinator authority alleviates the need for emergency permits in many situations.

On-scene coordinator authority for DGWs in lieu of a permit is specified at N.J.A.C. 7:14A-7.4(a)4; this is limited to 60 days and to situations where a discharge is required in order to mitigate a substantial and imminent threat to public health and the environment. Case managers will decide if sufficient information is available to justify use of on-scene coordinator authority.

The requirements for **general permits** are listed at N.J.A.C. 7:14A-6.13. Currently the SRP has not issued any general DGW permits; however, staff are currently drafting a general permit for two types of remediation discharges. These are discharges resulting from de-watering excavations done as part of remedial work (such as underground tank removal) and discharges of decontamination wash water for decontamination of field equipment used during remedial work (such as washing off trucks or backhoes). SRP plans to utilize N.J.A.C. 7:14A-6.13(d)8 and therefore will not require submittal of a formal request for authorization for this general permit; however, the general permit will require submittal of sufficient information to characterize the discharge and discharge location before the discharge can be authorized.

IV. OVERVIEW OF APPLICATION AND PERMITTING PROCEDURES

NJPDES application, renewal, modification (major and minor), and other related requirements are specified at N.J.A.C. 7:14A-4 and 16 (subchapters 4 and 16). Permit processing requirements are specified at N.J.A.C. 7:14A-15, entitled "Procedures for Decision Making-NJPDES Permit Processing Requirements." Additional DGW application requirements are in subchapters 7 (for all DGW permits), 8 (for UIC permits only), 9 (for sanitary landfills only), 10 (for hazardous waste facilities only) and 20 (for land application of residuals only).

The case manager will review the application for administrative completeness. The checklist in Appendix II of this manual is designed to be used for this review and to provide guidance for applicants completing the SRP-1 application form. If the administrative review reveals

deficiencies in the application, the case manager may try to resolve them over the phone. If this is not practical, a deficiency letter will be sent out. The letter will specify the deficiencies and require submission of the omitted information. If permit applicants are not notified in writing of administrative deficiencies within 30 days of submittal, the application, by law, will be considered administratively complete. Please note that an application can be administratively complete but not technically complete. The 30 day notification does not apply to a determination of whether an application contains sufficient technical information.

Upon receipt of an administratively and technically complete permit application, the NJDEP will prepare a draft NJPDES-DGW permit (which includes permit renewals and permit major modifications), based on the submitted application. The Department will publish public notice of the draft permit as specified in N.J.A.C. 7:14A-15.10, which includes sending copies of either the public notice, fact sheet, permit application, and/or entire draft permit to the parties specified in section 15.10(e) and (h) of the regulations. The length of the public comment period will be specified in the public notice document and must be at least 30 days in duration. For most facilities the public comment period begins when the public notice is published in the DEP Bulletin. The DEP Bulletin is published on the NJDEP Web page at www.state.nj.us/dep. For major facilities, which are defined at N.J.A.C. 7:14A-1.2, the public comment period will commence on the date the notice is published in a local newspaper for the area of the facility being permitted. For SRP's purposes, major facilities will include hazardous waste facilities being issued a NJPDES permit to regulate hazardous waste land disposal units and any other facilities SRP designates as major based on the level of public interest and/or other regulatory or statutory requirements that may become effective in the future.

At the close of the public comment period, the Department will address any significant comments in a "Response to Comments" document. Based upon the nature of the comments received, the Department will either: issue the permit in its final form; modify the draft permit and issue a final permit including the modifications made; modify the draft permit and re-issue the permit as a draft permit with a new public comment period; or not issue the permit as a final document. If a final permit is issued, the "Response to Comments" document will be included as an attachment to the final NJPDES-DGW permit and all interested parties will receive a copy. If a final permit is not issued, the "Response to Comments" document will be mailed to all interested parties who submitted comments. As a result of the comments received, the Department may hold a public hearing in the municipality in which the discharge activity would take place. If a public hearing is held, the public comment period is normally left open until a designated time after the close of the public hearing. (See N.J.A.C. 7:14A-15.11 et seq. for detailed information regarding the Public Notice and Public Hearing.)

A final permit may contain changes or revisions that reflect the Department's response to comments submitted during the public comment period. If major changes or revisions are required, the permit will be re-drafted with a new public comment period, pursuant to N.J.A.C. 7:14A-15.6 and 15.14.

Procedures regarding adjudicatory hearings and stays of permit conditions are found in subchapter

17 of the NJPDES regulations.

Questions regarding NJPDES/DGW permits in the Site Remediation Program should be directed to the case manager for the case.

V. SRP-DGW APPLICATION FORMS AND RELATED REQUIREMENTS

An administratively complete application consists of:

- a completed SRP-1 application form for administrative and technical information with appropriate signatures pursuant to N.J.A.C. 7:14A-4.9.
- any necessary attachments as specified in SRP-1
- Licensed Operator Worksheet (section VI. below and Appendix III)

Another document that must be completed as part of the permit application process, but that is not always required to be submitted to NJDEP, is:

- Engineer's Report (section VI. below)

The SRP-1 application is attached as Appendix I. Familiarity with the Ground Water Quality Standards (GWQS), N.J.A.C. 7:9-6.1 et seq., is needed for a clear understanding of Parts III and IV of the SRP-1 application form. At a minimum, the section of the GWQS entitled "Exceptions to the Classification System," N.J.A.C. 7:9-6.6, should be reviewed prior to completion of SRP-1. The term Classification Exception Area (CEA) is defined in N.J.A.C. 7:9-6.4. The checklist in Appendix II gives additional guidance on how to complete SRP-1.

N.J.A.C. 7:14A-4.3(a)13 of NJPDES specifies that applicants must submit, with a permit application, evidence that the application has already been submitted to the municipality in which the discharge will be located and to the affected local agency or sewerage authority. Applicants submitting a permit renewal or major modification application may omit this evidence unless the renewal/modification would include a new discharge or activity, increase in flow for an existing discharge, or change in the location or method of discharge. These regulations specify that "affected sewerage authority means the sewerage authority whose service area includes the site where the discharge requiring a NJPDES permit is located." Applicants should note that the regulation modifications eliminate the need for form WQM-003, "Statements of Consent," which was previously used for obtaining local agency input on permit applications.

Technical data/reports submitted to meet other SRP requirements may be incorporated by reference into the permit application if the case manager deems this to be acceptable. If it is acceptable, specific reference to the other document(s) must be made on the corresponding part of the SRP-1 form.

It is the obligation of the applicant to certify that the information furnished or referred to on this application (and its attachments) is true. False swearing is a crime in the State of New Jersey and subject to prosecution. IT IS THE APPLICANT'S RESPONSIBILITY TO OBTAIN ALL FEDERAL, STATE AND LOCAL PERMITS AS REQUIRED BY LAW.

Pre-application conferences are optional. The purpose of this informal conference is to discuss project concept, site location, pertinent rules and regulations, and other requirements.

Pre-application conferences may be arranged directly with your SRP case manager. If multiple permits are needed for one remediation project and they include permits not issued by SRP, the permittee may elect to request a joint pre-application conference with all applicable DEP bureaus responsible for issuing the needed permits. To request such a conference submit a written request with project summary, site plan (if available), and site location map to the address listed below. Please copy the SRP case manager on this request.

Office of Permit Information & Assistance
NJ Department of Environmental Protection (NJDEP)
P.O Box 423
Trenton, New Jersey 08625-0423

For permit renewal and major modification requests, a SRP-1 form is required; however the detailed technical information which was submitted on, or with, the original application need not be resubmitted, unless those documents cover significant changes or updates in the permitted activity. A renewal application shall document the dates that the required information was originally submitted to the Department and the names of the documents. A report summarizing the data and other findings generated during the preceding permit duration shall be submitted. Any proposed modifications to the discharge or permit shall be included.

Send the SRP-1 application form and all required information discussed above to:
(Insert the applicable information in the following two lines)

ASSIGNED CASE MANAGER
CASE MANAGER'S BUREAU NAME
Division of Responsible Party Site Remediation
Box 028
Trenton, NJ 08625

If there are any questions concerning the information required, please contact your case manager.

VI. APPLICABLE REQUIREMENTS FOR TREATMENT WORKS APPROVALS AND
LICENSED OPERATORS

N.J.A.C. 7:14A-22.4 lists the activities for which a Treatment Works Approval (TWA), (also called a construction approval) is not required. As a result of the February 1997 changes in the NJPDES regulations, N.J.A.C. 7:14A-22.4(a)13 now specifies that a TWA is not required for treatment works for ground water recovery and release back to the ground performed under the auspices of a SRP oversight document. However, as per N.J.A.C. 7:14A-22.2(g), a treatment works that does not need a TWA must still conform with any applicable requirements of subchapters 22 and 23 of NJPDES. Those applicable requirements and the licensed operator requirements for SRP remediation discharges are explained below.

A. General TWA/Licensed Operator Requirements

1. The permittee and operator of the treatment system must meet the requirements of the regulations entitled Licensing of Water Supply and Wastewater Treatment System Operators, N.J.A.C. 7:10A-1, unless the discharge unit is a Class V injection well accepting a discharge conveyed only by gravity or automatic siphon [see N.J.A.C. 7:10A-1.10(b)6].
2. An engineer's report and the construction plans/specifications for the treatment system must remain on file with the permittee and be available for SRP inspection prior to operation of the treatment system and should be ready for submittal to SRP if they are requested.
3. If the "as built" design differs from the original plans, "as built" plans and specifications must replace the original plans in the permittee's files prior to start-up of the system.
4. The permittee will be required to have a New Jersey certified Professional Engineer complete and submit: a certification that the treatment system has been constructed in accordance with the plans and specifications on file as specified above and; the form "Classification of Ground Water Treatment and Disposal Systems Worksheet" in Appendix III. A schematic diagram of the treatment system must be attached with the certification.
5. Prior to start-up of the treatment system, an Operation and Maintenance Plan for the treatment system must be prepared, and kept on file with the permittee and remain available for SRP inspection during the operating life of the system.
6. The permittee must obtain an operator of sufficient level, as determined by the completed worksheet cited in 4 above, and a copy of their most recent license must be submitted to the SRP case manager before operation of the system.
7. All visits by the licensed operator and/or alternate personnel must be noted in the system operation log. SRP may establish minimum site visit requirements if any condition of the permit is violated or if the performance criteria are not met.

B. Details for Engineer's Report

The Engineer's report should include or address the following and should be accompanied by a letter of appointment from a responsible official of the RP/permit applicant, which certifies that the engineer that prepared the design plans has been duly authorized to prepare those documents.

1. Engineer's Abstract;
2. Table of Contents;
3. Description of and detailed design plans for water treatment/disposal systems;
4. Detailed description of all units, purpose and function;
5. Ultimate destination of all treated waters, sludges and residues;
6. Schematic Diagram indicating and labeling all components of the extraction, treatment and disposal system
7. Average and peak flow requirements and rationale for design, including basis of design data;
8. Expected composition of influent to the treatment system;
9. Listing of all regular and intermittent flows which may enter the treatment system; e.g. ground

- water, stormwater, etc.;
10. Information in compliance with the Sludge Quality Assurance Regs. (N.J.A.C. 7:14A-4) if sludge is generated:
 - a) Composition and quantity of all sludges generated;
 - b) Name, registry number of sludge hauler, final disposal site;
 11. Expected composition of effluent from the treatment system;
 12. Evaluation of the capability of the system to meet the most stringent applicable effluent limitation for each pollutant parameter;
 13. Potential spills which may enter the treatment system and provisions, if any, for treatment or containment of such spills if applicable;
 14. Provisions for metering and monitoring of the system effluent;
 15. Discussion of the following if applicable:
 - a) instrumentation;
 - b) reliability, such as alternate power supply, backup units and alarms;
 - c) storage and handling facilities if any;
 - d) safety features;

C. Licensed Operator Determination Worksheet for SRP DGW Permits

In Appendix III the "Classification of Ground Water Treatment and Disposal Systems Worksheet" has been provided by the SRP to aid permit applicants in determining the appropriate facility class operator for site remediation discharges. It is NOT for use as part of a TWA application being submitted to the Bureaus of Engineering - North or South, DWQ. A copy of the completed form sent to SRP should be kept on file with the Engineer's Report.

If multiple treatment and/or disposal methods/units will be used they must all be depicted on the schematic diagram and indicated on the worksheet.

APPENDIX I

SRP'S NJPDES DGW APPLICATION FORM: SRP-001

**NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
SITE REMEDIATION PROGRAM (SRP)
NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM (NJPDES)**

APPLICATION FOR NJPDES PERMIT - DISCHARGE TO GROUND WATER

PART I - FACILITY INFORMATION

Note: The following is a condensation of the requirements of N.J.A.C. 7:14A-4. However, the Department may require any information identified therein to be submitted. If additional information is required for any question on this application, please attach supporting documentation (e.g., maps, documents referenced, additional pages, etc.). If such documentation has been previously submitted, identify the submission by name and date in the space provided.

1. APPLICANT(S)/OPERATOR

Name _____

Permanent Legal Address _____

City or Town _____ State _____ Zip Code _____

Telephone () _____ NJDEP ID No. _____
(e.g. ISRA Case #, BUST Case, etc. or indicate here if there is no NJDEP ID #.)

2. CO-APPLICANT (if applicable)

Name _____

Permanent Legal Address _____

City or Town _____ State _____ Zip Code _____

Telephone () _____

3. PROPERTY OWNER(S)

Name _____

Permanent Legal Address _____

City or Town _____ State _____ Zip Code _____

Telephone () _____

4. LOCATION OF ACTIVITY

Name of Facility/Site _____

Street Address/Location _____

_____ Lot No. _____ Block No. _____

City or Town _____ State _____ Zip Code _____

Municipality _____ County _____

Facility (discharge): Latitude ____° ____' ____"; Longitude ____° ____' ____"

The applicant is required to submit the following two maps:

A) *A site location map consisting of a 7.5 minute U.S.G.S. topographic sheet, extending one mile beyond the site boundaries, depicting the following: 1) site location, and 2) all sensitive receptors (e.g., potable wells, surface water bodies, etc.) within one-half mile of the facility;*

B) *A detailed site map that depicts the location(s) of 1) all discharges (e.g., injection wells, lagoons, etc.), 2) existing and proposed monitor wells, 3) existing and proposed recovery wells, and 4) all waste/hazardous constituent storage, treatment or disposal unit(s)*

5. CONTACT PERSON (This person must be familiar with the facility/site)

Name/Title _____ Telephone () _____

Mailing Address (if different than 4 above) _____

City or Town _____ State _____ Zip Code _____

6. TYPE OF PERMIT APPLICATION (check all that apply):

- ☐ "K" - Underground Injection (UIC)
- ☐ "K" - Covered Trench ☐ With or ☐ Without Laterals
- ☐ "J" - Surface Impoundment
- ☐ "I" - Infiltration - Percolation Lagoon
- ☐ "I" - Open Trench
- ☐ "H" - Overland Flow
- ☐ "G" - Spray Irrigation
- ☐ "08" - Other: _____

Will the discharge be treated ground water only? () Yes; () No Give brief description of proposed discharge unit and specify the nature of the liquid(s) to be discharged instead of, or in addition to, treated ground water.

7. OTHER PERMITS

List other NJPDES permits issued at the site (list permit numbers and describe discharge; for renewal applications, give expiration date of existing permit) and any other permit relevant to the proposed discharge.

8. LICENSED OPERATOR (Attach copy of certification and a list of facilities for which the person named is the licensed operator.)

Name_____

Company/Firm_____

Address (Street/Road)_____

City or Town_____ State_____ Zip Code_____

Telephone ()_____

9. PROPERTY OWNER'S CERTIFICATION

I hereby certify that I, _____
(Property Owner's Name)

own the property identified in this application. As owner, I grant permission for the activity to be permitted under this application and authorize the DEP to conduct on-site inspections, if necessary.

In addition, I certify: (check yes or no)	Yes	No
A) The activity will take place in an easement?	___	___
B) Part of the entire project (pipeline, disposal area, wells, etc.) is or will be located within property owned by the State of New Jersey?	___	___

C) Part of the entire project is or will be located within property owned by a municipality or county? (If yes, contact the Green Acres Program at (609)588-3461 for an applicability determination)	Yes _____	No _____
--	--------------	-------------

Signature of Owner and Date

{Note: If "yes" to statements A, B, or C the applicant must provide evidence of obtaining permission from the other property owners}

Print or Type Name and Position

10. CERTIFICATION BY APPLICANT/OPERATOR

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant civil and criminal penalties for submitting false information, including the possibility of fine and imprisonment for purposely, knowingly, recklessly, or negligently submitting false information.

Signature of Applicant/Operator and Date

Print or Type Name and Position

PART II - DESCRIPTION OF TREATMENT AND DISCHARGE

1. Briefly describe the proposed treatment system and its operation and attach a simplified schematic diagram of the complete treatment system.

2. Describe the characteristics of the proposed discharge. This description should include, at a minimum: 1) proposed location(s), 2) construction details, 3) depth of discharge, 4) amount of discharge, 5) screened interval(s) if discharge is via injection well, and the rationale for design, including basis of design data (e.g. infiltration test data, slug test or pump test data, etc.). Attach schematic diagrams of the discharge unit(s).

3. Will the discharge be () *within* or () *not within* the capture zone of ground water recovery? (The restrictions on the system effluent will vary with respect to the location of the discharge relative to the ground water capture zone.) If the discharge is *within* the capture zone, provide a complete justification of this claim as an attachment to this application (include maps, models, etc.) *Note: The NJPDES permit will require confirmation of discharge capture.*

PART III - MONITORING AND GROUND WATER QUALITY

1. Attach a list of influent and effluent compounds that exceed the higher of a) the Practical Quantitation Limit (PQL) or b) one-half the Ground Water Quality Criteria (GWQC)(N.J.A.C. 7:9-6 *et. seq.*). If the discharge is in the Pinelands, list those influent and effluent compounds that exceed the PQL.

2. If the discharge is not within a ground water capture zone, propose a monitoring plan to evaluate the effect of the discharge on ground water. *Note: Please be advised that a more comprehensive ground water monitoring program may be required under the oversight document to evaluate the effectiveness of the ground water remediation.* The monitoring plan shall include:

- A) Frequency of sampling, parameters sampled, sampling and analytical methods;
- B) The locations and construction characteristics of the monitoring wells; This explanation should identify (e.g., name, bedrock, unconsolidated, or glacial overburden) and describe (e.g., thickness, depth, texture, type, etc.) the formation(s) into which the discharge will occur. Justification of the proposed monitoring plan must be further substantiated with descriptions of site and regional hydrogeology (e.g., local and regional ground water flow direction(s), range of water table depths, confined or unconfined conditions, etc.). In addition, any special geological conditions should be described such as extensive bedrock fracturing and/or faulting, karst conditions, outcrops, etc. Include supporting documentation that contain ground water contour maps, well logs, geological maps and cross-sections, etc.

PART IV - GROUND WATER USE AND SENSITIVE RECEPTORS

1. Briefly describe ground water use from the affected aquifer(s). This description should include aquifer class and use (e.g., potable).

2. Attach a table (chart) that describes all irrigation, monitor, and domestic wells within one-half mile of the site and all industrial wells, public supply wells, and wells with water allocation permits within one mile of the site. The description should include: 1) type of well, 2) depth of well, 3) screened interval, 4) use, and 5) volume if/when pumping.

3. Attach a table (chart) that describes all other receptors located within one-half mile of the site. These receptors include: streams, rivers, ponds, and wetlands, etc.). The locations of these receptors must be depicted on a site location map. (See map requirements in PART I.)

PART V - SUBMISSION REQUIREMENTS

Notwithstanding the requirement at N.J.A.C. 7:14A-4.2(b), this completed application and any supporting documentation should be submitted to:

(Insert the - ASSIGNED CASE MANAGER AND CASE MANAGER'S BUREAU
NAME)
DRPSR/SRP/NJDEP
P.O. Box 028
Trenton, NJ 08625

A copy of the application shall be sent to the municipality in which the facility is located and to the applicable sewerage authority.

APPENDIX II

SRP'S NJPDES PERMIT APPLICATION ADMINISTRATIVE CHECKLIST

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
SITE REMEDIATION PROGRAM

NJPDES PERMIT APPLICATION ADMINISTRATIVE CHECKLIST

The following information is to be submitted on form SRP-1. All information must be provided to deem the application administratively complete. Details on the requirements are found on the appropriate form and in the NJPDES Regulations, specifically N.J.A.C. 7:14A-4.

Name of Applicant: _____

SRP-1 FORM: PART I - FACILITY INFORMATION

COMPLETED?

_____ Items #1-3. SRP-1 administrative information: Applicant/Operator, Co-Applicant (if applicable), & Property Owner. For NJDEP Case No., use the ISRA number for ISRA cases, use the incident number for BUST cases (if this is not known, use the tank registration number), and use the EPA number for all other cases.

_____ Item #4. Location of Facility:
Name, Address,, Lot and Block Nos., County. Also give municipality if different from the city/town listed in the address. For latitude and longitude, give that of the proposed discharge point. If the exact discharge location has not been decided upon, give latitude and longitude of the monitoring well datum or other control point (and identify). Locations should be referenced to the North American Datum of 1983.

_____ Attachments for Item #4. Map Submittals (See application for descriptions):
Facility Location Map using a U.S.G.S. Topographic map (7.5 minute) & Detailed Site Map (remember to include scale and north arrow).

_____ Item #5. Facility's Contact Person with title or position. Indicate in a cover letter if this is the person who should receive the draft permit instead of the applicant identified in Item #1.

_____ Item #6. Type of permit application. Permits are categorized by characteristics of the discharge mechanism:
K - pick the first "K" if the are injections wells. The second "K" refers to all other trench-type discharge units. "Laterals" refer to the conveyance of the discharge through horizontal perforated pipe(s).
J - Choose J if there is a holding pond or tank before discharge.
Item #6. (con't)
I - choose the first "I" if the discharge is to an open, shallow pond or lagoon. choose the second "I" if the lagoon is deeper than its greatest surface dimension.

H - Choose H if the discharge is to the ground surface via a perforated pipe or other mechanism to avoid scour.

G - Choose G if the discharge will be sprayed to a vegetated field.

08 - Choose 08 for any other type of discharge and describe.

Item #7. Other permits:

List other NJPDES permits at the site and any state-level permit associated with the treatment and discharge systems (wetlands, Pinelands, etc.).

Item #8. Licensed operator:

The licensed operator must be of sufficient level as determined on the system classification worksheet (N2 for most systems). Leave blank if system is exempt (Category K and gravity discharge).

Items #9 & 10. Certifications:

See N.J.A.C 7:14A-4.9 Signatory requirements of Applicant/Operator.

Part II - DESCRIPTION OF TREATMENT AND DISCHARGE

COMPLETE?

YES N/A

1a. Has the treatment system been described?

1b. Have the appropriate schematics or diagrams been submitted?

2a. Has the location of the proposed discharge been described?

2b. Are schematics or diagrams of the disposal unit attached?

3. Is there documentation that the discharge will be recaptured by the ground water recovery system?

Part III - MONITORING AND GROUNDWATER QUALITY

COMPLETE?

YES N/A

1. Is a list of contaminants of concern attached?

2. Is a ground water monitoring plan for the discharge attached?

Part IV - GROUND WATER USE AND SENSITIVE RECEPTORS

COMPLETE?

YES N/A

- | | | |
|-------|-------|---|
| _____ | _____ | 1. Has ground water use in the area been described? The description should address ground water use of the formation underlying the site and also that of any potentially affected aquifer. |
| _____ | _____ | 2. Has a description of all wells within .5 miles of the site been submitted in table/chart format? |
| _____ | _____ | 3. Have all receptors (environmental and water uses) within .5 miles been identified and compiled in table format? |

Part V - SUBMISSION REQUIREMENTS

COMPLETED?

- | | |
|-------|---|
| _____ | 1. Has the original, signed application been sent to the case manager? Has the application fee (\$350) been enclosed? (Note: \$700 for emergency permits) |
| _____ | 2. Have copies of the application been sent to the municipality and sewage authority? NOTE: The Department may require evidence of submission. See pg. 10 of the SRP technical manual and/or N.J.A.C. 7:14A-4.3(a)13. |

APPENDIX III

CLASSIFICATION OF GROUND WATER TREATMENT AND DISPOSAL SYSTEMS WORKSHEET LICENSED OPERATOR DETERMINATION FOR SRP DGW PERMITS

**NJDEP SITE REMEDIATION PROGRAM (SRP)
CLASSIFICATION OF GROUND WATER TREATMENT AND DISPOSAL SYSTEMS WORKSHEET
LICENSED OPERATOR DETERMINATION FOR SRP DGW PERMITS**

PRINT OR TYPE SRP LEAD BUREAU: _____

PRINT OR TYPE CASE MANAGER: _____

NJPDES NO. NJ _____	FACILITY NAME: _____				
LOCATION: _____					
FACILITY CLASS	N1	N2	N3	N4	NS
RANGE OF POINTS	6 to 19	20 to 49	50 to 69	70 and greater	Special/Limited

Facility Class NS = Gravity Oil Separation and/or Gravity Sedimentation

ITEMS	POINTS		ITEMS	POINTS	
	Possible	Actual		Possible	Actual
A. TOXICITY GROUP			E. SECONDARY (continued)		
All SRP Remediations are Group V.	20	20	Disinfection	2	
			Spray Irrigation/Overland Flow	10	
B. RECEIVING WATERS (DGWs)			Oxidation ditches	10	
Ground Water	5	5	Other/Miscellaneous	#	
C. HYDRAULIC LOAD			F. ADVANCED		
Less than 0.1 MGD	2		Ammonia or Nutrient Removal	10 / 10	
0.1 to 1.0 MGD	4		Advanced Filtration	5	
1.0 to 10.0 MGD	6		Carbon Adsorption or Reverse Osmosis	10 / 10	
Greater than 10.0 MGD	10		Post Aeration	2	
D. PRIMARY			Ion exchange	10	
pH Adjustment or Equalization	1 / 1		Ultraviolet - Peroxide Reactor	5	
Oil Separator or Dissolved Air Flotation	3 / 3		G. SLUDGE HANDLING		
Chemical Coagulation / Flocculation	5		Digestion	5	
Sedimentation / Clarification	3		Sludge Conditioning or Composting	2 / 7	
Chemical Addition or Disinfection	2 / 2		Mechanical Dewatering	4	
Filtration / Simple (bag) Filters	5 / 2		Drying Beds or Lagoons	2	
Air Stripping	5		Thickening or Dissolved Air Flotation	3	
Other/Miscellaneous	#		On-Site Landfill	2	
E. SECONDARY			Incineration/Wet oxidation	10	
Activated Sludge	15		Subtotal		
Biofiltration / Stabilization	10 / 5				
Subtotal			GRAND TOTAL⁺		

+If unique treatment plant conditions exist, the Department may adjust the activity classification.

#Other/Miscellaneous Points to be determined by the Department after receipt of documentation detailing the system.

*Mailing address of applicant if different from location address:

EXPLANATION OF ITEMS LISTED ON WORKSHEET

On the worksheet's POINTS column the left side gives the point score assigned for the different items; the right side is to be used to tally-up the applicable numbers for the applicable items. Obtain a grand total and compare it to the range of points listed at the top of the worksheet to determine the facility class. Some treatment and disposal methods on the worksheet are not often used for ground water or other site remedial actions but are listed on the worksheet to help ensure consistency with the licensing rules.

Where two methods are on one line, the number of points listed first is for the first method and the second number is for the other method. For example, pH Adjustment and Equalization are on the same line; if both were used, the actual score that should be entered on that line is 2. If one or the other only were used the score should be 1.

- A. Toxicity Group - Based on N.J.A.C. 7:10A-1.14(c)3, site remediation discharges are assigned to Toxicity Group V.
- B. Receiving Waters - Since this worksheet is only for use with remediation systems that include a discharge to the ground, the actual score must be 5 as indicated on the worksheet.
- C. Hydraulic Load - This section reflects that more points are given for a higher flow system because it should take more operator skill to manage a larger system.
- D. Primary - Designates treatment processes usually done first (and usually simpler). One exception would be nutrients, peroxides, and/or microbes added to the waste stream to enhance biodegradation. Add 2 points for each of these under "Chemical Addition or Disinfection."
- E. Secondary - Designates processes usually done at the end of treatment (and usually more difficult).
- F. Advanced - Designates methods that are more difficult to operate.
- G. Sludge Handling - If any sludge is generated by a treatment or discharge to ground water method, any on-site treatment or disposal of the sludge must be included on the worksheet. For example if iron is removed from contaminated ground water prior to air stripping, the resulting iron sludge must be managed.

The "other/miscellaneous" category listed is given to provide flexibility where unique treatment plant conditions exist. However, this item MUST NOT be used without prior consultation with the Department.